

CLAIMS

1. A method for selecting structures for carbon nanotubes by the light irradiation, characterized in selectively obtaining carbon nanotubes having structures different from the structures of the carbon nanotubes to be vanished by irradiating carbon nanotubes with a light beam of a single wavelength so as to have carbon nanotubes in specific electron states in the excited states, and oxidizing and combusting the carbon nanotubes in the excited states by an oxygen or an oxidizing agent so as to vanish the same.

2. The method for selecting structures for carbon nanotubes by the light irradiation according to claim 1, characterized in that the carbon nanotubes in the excited states are vanished by oxidizing and combusting at a temperature of 0°C or more and 500°C or less.

3. The method for selecting structures for carbon nanotubes by the light irradiation according to claim 1 or 2, characterized in that the oxidizing agent is a hydrogen peroxide water, a nitric acid or a potassium permanganate.

4. The method for selecting structures for carbon nanotubes by the light irradiation according to any one of claims 1 to 3, characterized in that light beams having different wavelengths are irradiated to the carbon nanotubes respectively for selectively oxidizing, combusting and vanishing carbon nanotubes having specific structures corresponding to the wavelength of each light beam.

5. The method for selecting structures for carbon nanotubes by the light irradiation according to any one of claims 1 to 3, characterized in that only carbon nanotubes having specific structures are selectively obtained by irradiating the carbon nanotubes successively with a plurality of light beams having different wavelengths.

6. The method for selecting structures for carbon nanotubes by the light irradiation according to any one of claims 1 to 5, characterized in that the carbon nanotubes are single-wall carbon nanotubes.